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United States Patent [19]**Blank**[11] **Patent Number:** **5,577,179**[45] **Date of Patent:** **Nov. 19, 1996**[54] **IMAGE EDITING SYSTEM**[75] Inventor: **Arthur M. Blank**, San Diego, Calif.[73] Assignee: **ImageWare Software, Inc.**, San Diego, Calif.[21] Appl. No.: **919,584**[22] Filed: **Jul. 23, 1992****Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 844,299, Feb. 25, 1992, Pat. No. 5,345,313.

[51] **Int. Cl.⁶** **G06F 15/00**[52] **U.S. Cl.** **395/135**[58] **Field of Search** 395/133, 135,
395/121, 122; 345/113, 114[56] **References Cited****U.S. PATENT DOCUMENTS**

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A system and method for editing digital images in three dimensions includes a computer for storing a digital image of an object and a background, as well as at least one additional background image which includes various components in a three dimensional configuration. The periphery, or edge, of the object has a first hue, and the surrounding background has a second hue. Based upon the difference between the hues and a predetermined hue difference, the computer locates the edge of the object and removes portions of the image (i.e., the background) that are outside the edge. Then, the object can be combined with a preselected one of the other background images so as to form a composite image. Components of the preselected background image are assigned relative positions in the X-Y plane, and are also assigned a value defining their location in one of a plurality of layers which form the Z dimension of the image. The object to be combined with the background is also assigned a value defining its location in at least one of those layers. Optionally, the gamma of the image of the preselected background and the gamma of the image of the object can be matched, thereby making the object appear as if it was imaged under the same lighting conditions as the preselected background.

27 Claims, 28 Drawing SheetsMicrofiche Appendix Included
(125 Microfiche, 2 Pages)